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A total of 50 subjects, low in sociometric status and identified as educationally disadvantaged on the basis of high "school anxiety" were drawn from fifth and sixth grade public school children. Control and experimental groups were set up. Elementary counselors worked with the experimental groups using procedures based on the theory of cognitive dissonance. In one group subjects were requested to verbalize their intended behavior change. Primary objectives were to determine if the subjects showed differential improvement by treatment with respect to: (1) school anxiety, (2) severity of student behaviors as rated by subjects, (3) severity of student behaviors as rated by teachers, (4) teacher-pupil relationships as rated by teachers, and (5) teacher-pupil relationships. There were three major conclusions: (1) counseling with or without public commitment was not found to positively influence the above five criteria, (2) certain counseling "conditions" appeared irrelevant to some behavioral problems, and (3) attitudes of teachers who consulted with counselors improved toward guidance while attitudes of teachers who did not consult with counselors deteriorated. (Author/KJ)

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U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
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Final Report

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PUBLIC COMMITMENT AND COUNSELING**

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Carbondale, Illinois**

June 1969

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**U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE**

**Office of Education
Bureau of Research**

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Summary

Fifty subjects low in sociometric status, and identified as educationally disadvantaged on the basis of high "school anxiety," were drawn from a population of 461 fifth and sixth grade public school students and randomly assigned to five groups. Two groups of 11 Ss each were control conditions, one group containing control Ss in classrooms in which there were also experimental Ss and the other group in which Ss were in classrooms in which there were no experimental Ss. The remaining three groups used in the study received differential treatments. In one of these, the teacher guidance group, teachers were informed that the Ss in their classrooms, who met both selection criteria, were highly anxious and were having inter-personal difficulties. They were advised that a counselor would be available as a consultant if help regarding these students were needed. No further treatment was administered.

Four elementary school counselors held 12 weekly 30 minute individual counseling sessions with each subject in the other two treatment conditions which contained a total of 24 Ss. A cognitive behavioral approach to counseling was used. The procedures were based on the theory of cognitive dissonance which states that under certain conditions, persons experiencing cognitive dissonance, an uncomfortable state, will seek to reduce their discomfort through behavioral or attitudinal change. Counselors in this study sought to bring about positive behavioral change by either reducing already existent dissonance experienced by their counselees or by intentionally arousing dissonance, and thereby motivating the individual to change his behaviors to reduce psychological discomfort.

Counselors in one of the counseling groups attempted to bring about dissonance reduction through positive behavioral change by providing the proper conditions conducive to change such as minimal threat and pressure and an accepting atmosphere. In the other counseling group precisely the same

conditions were provided but in addition to these, Ss, on their own or at the request of the counselor, made a public commitment to a significant other (parent, teacher, peer) of their intended behavioral change(s). Public commitment, a technique used in dissonance theory, has been shown to increase the probability of positive behavioral change occurring.

Primary objectives of the study were to determine if the Ss showed differential improvement by treatment with respect to five specific criteria. Relative to these objectives the findings of this study indicate that there were no statistically significant improvement differences in the following criteria among the five treatment groups: "school anxiety"; severity of student behaviors as rated by Ss; severity of student behaviors as rated by teachers; teacher-pupil relationships as rated by teachers; teacher-pupil relationships; and, sociometric status. A sixth objective was to investigate differences in behavioral severity reduction as rated by Ss and by teachers for Ss in the public commitment treatment between Ss who made a public commitment and those who failed to commit on specific behaviors. Major differences were found between behavioral severity ratings of committed and non-committed Ss. The data did reveal, however, that teachers did not tend to perceive student behavior changes as readily as did the Ss themselves. Objective seven concerned investigating the degree to which the conditions of affect, understanding, specificity, and exploration were provided in counselor responses to counseled Ss. Findings indicated a relatively low level of these conditions were provided. Another objective, however, was to investigate the relationships among criterion improvements and the level of the conditions provided. Findings indicated significant correlation coefficients ($r > 0$) in only two out of the 20 comparisons made. Exploratory responses were found to correlate positively with improved teacher-pupil relationships ($r = .38$) and understanding responses correlated positively with reduction in "school anxiety" ($r = .44$) ($p < .05$). The final objective of the study was to determine if there was a difference in teacher attitude gain toward guidance between the experimental and control classrooms. The differences in attitudes toward guidance

between those teachers who worked with counselors in the study and those who did not were found to be significant ($p < .05$).

Conclusions

Three major conclusions emerged from this study: Counseling with or without public commitment was not found to positively influence school anxiety, behavioral severity, teacher-pupil relations or sociometric status; certain counseling "conditions" appeared irrelevant to some behavioral problems of children while having either a positive or a negative relevance to other criteria; attitudes of teachers who consulted with the counselors improved toward guidance while attitudes of teachers who did not consult with their counselors deteriorated.

PROBLEM

Most research studies and theories indicate that the student's interpersonal relationship with significant or important others is a factor which influences academic performance. Psychologists such as Combs and Snygg (1959), Rogers (1951), Festinger (1957), and others have for some time emphasized the influence of interpersonal relationships, particularly evaluational interactions, upon individuals' subsequent attitudes toward themselves, their behavior, and/or academic achievement. This is based upon the premise that one's attitude and behavior, including academic attitudes and behavior, are primarily learned through interaction with significant others (teachers, peers, and parents), particularly through evaluational interactions. Thus, the relationship that a child has with "significant others" within the school environment may have the potential of being either academically facilitating or academically detrimental depending upon its quality, as has been indicated by several recent studies (Davidson & Lang, 1960; Flanders, 1965; Schmuck, 1966; Hill and Sarason, 1966; Staines, 1958). If this hypothesis is true, then the schools must seek to find methods of enhancing the student's relationships with significant others within the school (teachers and classmates) in order to facilitate the student's academic performance. This study investigated an approach designed to enhance educationally disadvantaged

students' interpersonal relationships within the school environment, and to facilitate student change.

REVIEW AND DISCUSSION OF RELATED LITERATURE

School personnel are concerned with providing conditions which facilitate desirable personal changes or learnings in student attitudes and behavior. Rogers (1951) contended that under certain conditions, primarily involving absence of threat to the self structure, experiences which are inconsistent with the self may be perceived, and examined, and the structure of the self revised to assimilate and include such experiences. Festinger's (1957) work has led to a number of similarly related postulates. For example, research has suggested that a person who is induced under minimal pressure, threat, or reward to listen to, to say, or to do something that is contrary to his private opinion, the greater is the probability that he will change his opinion and bring it in line with what he has heard, said, or done (Brehm and Cohen, 1962; Brock and Blackwood, 1962; Cohen, Terry, Jones, 1959; Elms and Janis, 1965; Festinger and Carlsmith, 1959; Hovland, Campbell, and Brock, 1957; Janis and King, 1954). Furthermore, the probability that he will change his opinion in a relatively short period of time and bring it in line with what he has said or done is increased if he is informed that his parents or other significant persons are aware, or will be made aware, of the newly-expressed attitude or behavior (Brehm, 1959; Brehm and Cohen, 1962; Hovland, Campbell, and Brock, 1957).

The research findings discussed above which are related to Festinger's (1957) work and Rogers' (1951) notions concerning the counseling process, provide some guidelines which school personnel might use. Festinger's and Rogers' position is that change occurs and seems more likely to endure in a relatively threat-free situation. Their position suggests that it is important for the school counselor and other school personnel to realize that students should feel relatively threat-free or experience low anxiety during school.

Anxiety is an uncomfortable state experienced by the individual, as is dissonance (Festinger, 1957) and incongruence (Rogers, 1951). Incongruence and

dissonance seem to refer essentially to a motivated state during which an individual experiences contradictory perceptions either about himself or his environment. Both, incongruence and dissonance, represent an uncomfortable state for the individual, characterized by feelings of tension, anxiety, and conflict which an individual attempts to reduce or alleviate, and suggest that the individual will attempt to lessen the incompatibility of the perceptions or cognitions (Mayer and Cody, 1968).

If one desires to facilitate personal, social, or academic change, the probability of success will be greater if students are selected who are motivated to change (i.e., are experiencing dissonance or incongruence.) Since anxiety seems to reflect such a motivated state, only students with high anxiety, an educationally disadvantaged state theoretically conducive to change, were selected as subjects for the study.

Several recent research studies have indicated that high "school anxiety" is related to poor academic self-concepts, poor school achievement, and negative experiences in the school setting (Coopersmith, 1959; Flanders, 1965; Hill and Sarason, 1966). Elementary school students with high "school anxiety" can be considered educationally disadvantaged because they are poorly disposed to gain from the usual school experiences provided. Therefore, educationally disadvantaged is defined herein as high "school anxiety."

It can be concluded from the above discussion that school personnel are confronted with at least two responsibilities. The first is to recognize the value of dissonance experienced by students as an element which might be an essential prerequisite to attitudinal change and a facilitator in assisting the individual in modifying his behavior. The second is that they should recognize that some individuals might need and perhaps seek assistance in developing sufficient dissonance or an awareness of their dissonance, to enhance the probability of behavioral change. Some might consider this latter point as undue intervention on the part of someone such as the school counselor, especially if the dissonance is initiated or increased by the counselor. However, if man is viewed in the process of "becoming" (Rogers, 1951,) dissonance or incongruence

would seem to be an essential element in an individual's maturational process, perhaps sufficient enough to justify its instigation by the counselor (Mayer and Cody, 1968).

An additional implication from the previously mentioned studies (Brehm, 1959; Hovland, Campbell, and Brock, 1957) seems to have important implications related to counseling. Their results suggest that intra-personal change would be facilitated if the counselor were to inform his important significant others (teachers, parents, and peers) as to the outcomes or decisions he arrived at during the counseling process. This change would likely result in a short period of time, provided he was not forced to do so (Brehm and Cohen, 1962), and he usually tells them the truth (Bem, 1965). Providing, then, that the assumptions of truthfulness and minimal pressure are met, the activity of informing significant others (teachers, parents, and/or peers) would seem to facilitate the counselee's self-directed change through publicly committing him to change. (Bem, 1965; Bem, 1967; Brehm, 1959; Hovland, Campbell, and Brock, 1957).

As a result of being publicly committed to change, significant others now expect, and are likely to reinforce, the new attitude and/or behavior, particularly if they perceive the new attitude and/or behavior as positive. Furthermore, since the client knows that important others have been told of his change, he is likely to perceive others as seeing him in this new light. If we tend to perceive ourselves and behave as we believe others perceive us, as Cooley (1902) indicated, then notifying significant others of a change should increase the likelihood of a lasting change as a result of changing the self.

OBJECTIVES

The specific objectives of the study were as follows:

1. To investigate the relative effects of each of the five treatments on school anxiety.
2. To investigate the relative effects of each of the five treatments on student behavior (severity as rated by subjects).
3. To investigate the relative effects of each of the five treatments on student behavior (severity as rated by teachers).

4. To investigate the relative effects of each of the five treatments on teacher-pupil relations.
5. To investigate the relative effects of each of the five treatments on sociometric status.
6. To investigate behavioral severity reduction as rated by the Ss and by the teachers between the committed and non-committed behaviors of the public commitment condition.
7. To investigate the degree to which conditions, as measured by the CVRS (Counselor Verbal Response Scale, were provided for the counseled Ss.
8. To investigate the relationship among criterion improvement and the degree to which conditions, as measured by the CVRS, were provided for counseled Ss.
9. To investigate the effects between control and experimental treatment conditions on teacher attitude gain towards guidance.

INSTRUMENTS USED

A Test Anxiety Scale for Children (TASC)

The TASC was used as a pre- and post-measure of differences among the treatment conditions. Anxiety was chosen as a dependent variable because it focuses more upon test or school content, is not as threatening to teachers or students, and tends to correlate better with indices of intellectual and academic performance than the Children's Manifest Anxiety Scale (CMAS) or the General Anxiety Scale for Children (GASC) (Sarason, Hill, Zimbardo, 1964). Also, extreme increases or decreases in TASC anxiety status have been shown to be significantly related to reciprocal changes in intelligence and achievement-test performance over time (Sarason, Hill, Zimbardo, 1964). The average test-retest reliability for the TASC over a four-month interval between administration is reported to be .61 for boys and .71 for girls (Sarason, Hill, Zimbardo, 1964). A copy of the instrument may be found in the appendix.

Child Behavior Rating Scale (CBRS)

The Child Behavior Rating Scale was developed specifically for this research project from funds granted by Southern Illinois University to the principal investigators. The purpose of the instrument is to ascertain the severity and number of elementary school students' behavioral problems as indicated by them and their teachers.

In the initial development of the CBRS 32 items were used. It was administered to approximately 60 fifth and sixth grade students. On the basis of the problems indicated and the severity of those problems the scale was revised to include the existing 15 items which represent a wide range of school related problems.

The CBRS was administered to all fifth and sixth grade students in the classrooms participating in the study. Each student obtained two scores, one indicating the total number of problems, the other, the severity of the behaviors. The latter was determined by assigning values of 4, 3, 2, and 1 to the four possible frequencies with which a child engaged in a particular behavior. These were lettered a, b, c, and d. Each child must have checked at least one problem for assignment to a treatment group.

The instrument was administered prior to, and after treatment to ascertain any changes in the students' perceptions of problem severity as a function of treatment.

The checklist was also used to measure teachers' perceptions of their individual students' problems. Although the teachers' scores were not used as selection criteria for experimental subjects, pre and post scores were obtained to observe differences in their perceptions of students' problem severity as a result of differential treatment.

Reliability was determined by the test-retest method with a three month interval between administration. Coefficients of .63 and .74 were obtained for self ratings and teachers' ratings of control subjects respectively. A copy of the instrument may be found in the appendix.

Teacher-Pupil Relationship Inventory

The Teacher-Pupil Relationship Inventory, a modified sociometric device developed for a previous study, (Mayer, Kranzler, and Matthes, 1967a) was used for a pre and post measure to determine differences in peer perceptions of teacher-pupil relations. It asked each student to rank on a five-point scale how well his classmates "get along" with his teacher. An alphabetical list of

the classroom students was given to each pupil. The students were then asked to do the following:

1. Place the number 1 next to the three students in your classroom who seem to get along the best, or very, very well with the teacher.
2. Place the number 2 next to the five students in your classroom who seem to get along pretty well with the teacher, but not quite as well as the three you have already named.
3. Place the number 4 next to the five students in your classroom who seem to not get along very well with the teacher.
4. Place the number 5 next to the three students in your classroom who get along the worst with the teacher.
5. Please check to make sure that no student has more than one number beside his name. There should be three 1's, five 2's, five 4's, and three 5's.

Students receiving no rank were assigned a rank of three. Thus, students who received low scores were rated as "getting along" well with their teachers, while high scores indicated possible teacher-pupil conflicts (i.e., the lower the criterion score, the better the teacher-pupil relationship).

The scale was given to 5th and 6th grade students in Collinsville, Illinois, on a pre and post basis with a three week interval between testing time. A high relationship ($r > .70$) was found between the pre and post test results which indicated that the scale was stable over a short period of time.

Sociometric Test

A sociometric device developed by Gronlund (1959) was used in other studies which employed counseling as a treatment for elementary school children (Kranzler, Mayer, Dyer, and Munger, 1966; Mayer, Kranzler, and Matthes, 1967b) was used. Each student lists three classmates with whom he would most like to sit, play, and work on committees. Test-retest correlations from fourth, fifth, and sixth grades are reported to range from 0.72 to 0.92 (Gronlund, 1959).

Sociometric status has been shown to be associated with pupils' classroom behavior (such as those listed on the Behavioral Rating Scale) and achievement (Havighurst, Bowman, Liddle, Mattheys, and Pierce, 1962; Schmuck, 1963). It has also been indicated that sociometric status is a sensitive index of behavioral

change (Cox, 1953; Kranzler, et. al., 1966), and later life adjustment (Havighurst, et. al., 1962).

Teacher Attitude Toward Counseling and Guidance

This inventory was developed and used to evaluate elementary guidance demonstration projects in Illinois by the Illinois State Department of Pupil Personnel Services (1968). The inventory contains twelve statements regarding the importance, effectiveness, and value of counseling and guidance activities with elementary school children. Teachers respond to each statement indicating how characteristic the statement is of their feelings by rating it from one to five (one being "not characteristic of my present feelings," and five being "highly characteristic of my present feelings"). A copy of the instrument may be found in the appendix.

IPR (Interpersonal Process Recall) Counselor Verbal Response Scale (CVR)

The Counselor Verbal Response Scale (CVR) is a scale developed to describe counselors' responses to client communication in terms of several dimensions (Kagan and Krathwohl, 1967). Four of the dichotomized dimensions used are: (a) Affective-cognitive; (b) understanding-nonunderstanding; (c) specific-nonspecific; (d) exploratory-nonexploratory. A fifth dimension (effective-noneffective) provides a global rating of the adequacy of each response and is made independently of the four other ratings.

Reliability was established using trained judges to rate counseling tapes selected from the tape library of the Department of Counseling at Michigan State University. Six such audio tapes were rated by four raters (all rating the same twenty consecutive counselor responses drawn from the middle portions of the sessions). Interrater reliability coefficients reported for the five dimensions were: affective-cognitive, .80; understanding-nonunderstanding, .81; specific-nonspecific, .70; exploratory-nonexploratory, .87; effective-noneffective, .83.

Validity was established by comparing the ratings received by those counselors who were PhD candidates with those received by counselors who were M.A.

candidates. These two groups of counselors were reported to be clearly differentiated by the ratings received with the PhD candidates receiving more responses rated effective, understanding, specific, exploratory, and effective. A copy of the instrument may be found in the appendix.

PROCEDURE

Pre-Testing

During the second week of October, 1968, the following tests were administered by the counselors to 461 fifth and sixth grade students from 16 classes: the Child Behavior Rating Scale, the Teacher-Pupil Relationship Scale, the Sociometric Test, and the Test Anxiety for School Children. The teachers were also asked to react to the following instruments: the Behavior Rating Scale (each teacher rating each student in her class), and the Teacher Attitude Toward Counseling Scale.

Confidentiality and the importance of students making their own responses were stressed. The test results were available only to the primary investigators and clerical help. The counselors did not observe students' test profiles or scores except for the behavioral rating scales and sociometric scores.

Selection and Assignment of Subjects and Counselors

The subjects of this study were fifth and sixth grade students selected from the seven elementary schools in the Herrin school system which neighbors Carbondale, Illinois. Grades five and six from this system were chosen for the following reasons: (1) students of this age have the ability to take written tests; (2) practical considerations such as district permission, accessibility, and sufficient numbers of students; and (3) the possibility of a follow-up study the succeeding school year.

Students who scored among the upper 1/3 of the total sample in "school anxiety," (Hill and Sarason, 1966) as measured by the Test Anxiety Scale for Children (TASC) and those who scored in the lower 1/3 of the total sample in sociometric status were selected as possible subjects for the study.

Each child's sociometric status was calculated as the ratio of the total number of times he was chosen by his classmates compared to the total number of students responding to the instrument in that classroom. An additional criterion for selection was that the subject must have checked at least one "problem" on the CBRS to be included in the study (only two who met the dual criteria regarding sociometric status and "school anxiety" were excluded for not checking some "problem.")

Initially, 54 subjects meeting the above-stated criteria were randomly assigned to one of four (4) groups designated as follows: (1) counseling; (N-24) (2) teacher-guidance; (N-11) (3) Control A; (N-11) and (4) Control B; (N-8). Designation of counseling subjects as in either the public-commitment or non-public commitment conditions was deferred until after the sixth session of counseling in order to diminish possible biasing effects resulting from counselors' expectancies toward either of the counseling treatments. After the sixth session specific assignment of counselees to one of the two counseling conditions was done randomly. (No attempt was made to insure that the counselors had equal proportions of subjects within each of the treatment conditions).

The amount of time devoted to the study by each of four counselors varied. Two counselors counseled with five subjects each while the other two worked with eight subjects each. Because of this inequity of counselor load and a desire to minimize unnecessary travel among the seven schools used in the study, preliminary divisions of subjects by schools were completed so as to have two assignments involving two schools and eight counseling subjects each and two assignments involving two schools and five counseling subjects each. Counselors were then assigned randomly to a pre-defined work assignment taking into consideration whether the counselor should be assigned to a "heavy" or a "lighter" assignment. (In only one case did two counselors work in the same school; and in no case did two counselors work with children from the same classroom.)

Counselors Described

All four counselors had completed Master's degrees in counseling and guidance prior to this study and were advanced graduate students. Three of the counselors were male doctoral students specializing in elementary school counseling and guidance, while the fourth was a female completing requirements for the Specialist degree in elementary school guidance.

Three of the counselors were experienced classroom teachers, and two of them had had three and four years experience respectively as public elementary school counselors. The other two counselors had completed an elementary school counseling practicum in their previous graduate work. During the summer prior to commencement of the study all four of the counselors received additional didactic and practicum training in the counseling and guidance approaches to be used. This supervision continued throughout the project.

Treatment Conditions

Publicly committed counseled students. Each of the twelve subjects within this treatment condition was randomly assigned to one of the four counselors. The subjects met for thirty minutes once a week for 12 weeks with their assigned counselor. Each of the sessions was taped.

The subjects were identified to their teachers as students with high "school anxiety" who were having interpersonal difficulties. Throughout the sessions the teachers cooperation was sought whenever it was thought to be of benefit to the subject.

A cognitive behavioral approach was used by the counselors in the counseling sessions (Evans and Cody, 1969; Mayer and Cody, 1968; Mayer, Rohen, Whitley, 1969). They began by exploring with the child the previously completed behavior checklist for it was with these behaviors that the study was primarily concerned. As the counselor and subject discussed the behavior checklist "general" problem areas were identified. As the subject's attitudes and feelings towards these problems were explored more specific areas were defined and clarified. For example, a general problem such as poor arithmetic grades might have been broken

down to a problem in remembering to take assignments home, turning assignments in, or not attending to the teacher during class time. After the problems were discussed and clarified the subject and counselor selected one specific problem for immediate attention such as turning in arithmetic assignments.

Once the subject developed and verbalized a desire to change his particular problem situation a list of alternative goal behaviors was jointly developed and their consequences explored. The alternative appearing to the counselor and subject to offer the greatest likelihood of success, and which would enable the subject to obtain that which he desired (attention, praise, etc.) was selected for trial. A tentative plan to instigate the alternative was formulated and perhaps rehearsed through role playing to make it easier for him to implement. At this point the technique of "public commitment" was used. The subject, or the subject with the assistance of the counselor, was encouraged to commit himself concerning the desired behavior change to some significant other(s) such as a teacher(s), parent(s), and/or peer(s) (Ex. Miss X, I am going to complete my arithmetic work whenever you make an assignment). The counselors attempted to work with the significant others involved concerning the commitment to assure that the subject would receive positive reinforcement for the new behaviors. Subsequent counseling sessions were concerned with follow-up activities and/or the resolution of other problems.

Non-publicly committed counseled students. The treatment condition for these twelve subjects was like that in the previous condition except for one aspect. The child was not encouraged to publicly commit himself on a desired behavior change to a significant other (other than the counselor). Furthermore, no attempt was made to assure that the subject would receive positive reinforcement from the environment for his new behavior(s).

Teacher guidance. The eleven subjects in this treatment group were not called from the room nor did they receive counseling. They were identified to the individual teachers as students with high "school anxiety" who were having interpersonal difficulties. The counselor was available as a consultant regarding these students if the teacher sought help. The counselors, however, were not

consulted with by the teacher concerning these students during the study. Factors contributing to the latter may have been that their time spent in the schools was limited and they did not, therefore, become an integral part of the school setting. Also, the teachers were not familiar with elementary counseling itself.

No treatment control A. The eleven subjects in this group were not identified to the teacher, nor were they counseled. The subjects were selected from classrooms in which other children were available for selection for counseling and/or teacher guidance.

No treatment control B. Before subjects were assigned, two classrooms were randomly designated to be control classrooms. No students within these two classrooms were identified to the teacher as being highly anxious or having interpersonal difficulties. No child in the classroom was counseled and the counselors did not serve as consultants to the teachers of the two classrooms.

The two randomly designated classrooms (a fifth and sixth grade) were from different schools. Four subjects met the selection criteria in each of the two control classrooms.

Post-Testing

All treatments were terminated during February, 1969. During the first week of March, all students and teachers again completed the same instruments which were given during the pre-testing. (Counselors administered the post-test instruments to students in schools other than those in which they counseled in order to avoid possible contamination of post-test results arising from a familiar counselor administering the post-tests.) In addition to the above criterion instruments, tape, randomly selected taped samples of counseling sessions were evaluated according to the CVRS by trained non-project personnel.

Measurement of Counseling Conditions

Two raters were trained in using the CVRS (Counselor Verbal Response Scale) developed by Kagan and Krathwohl (1967). The raters were Master's degree candidates in elementary school counseling and guidance in the Department of Guidance and Educational Psychology at Southern Illinois University. Both had acquired

considerable experience working together as raters in earlier research studies. Approximately six hours were required for training of the two raters.

At the end of training, but prior to the assignment of counseling tapes to the raters, the two raters were presented with three different ten minute samples which they rated independently using the CVRS. The agreement among the two raters across four basic dimensions of the CVRS was: Affective: 94%; Understanding: 97%; Specific: 97%; and Exploratory: 93%. The raters also met twice during the week in which they were rating the tapes in order to obtain additional reliability checks from two ten-minute samples. Again, the ratings were performed independently. The total percentages of agreement between the two raters over all seven ten-minute samples used in the reliability procedure were: Affective: 95%; Understanding: 96%; Specific: 97%; and, Exploratory: 90%.

At the end of the training period the raters were randomly assigned forty-eight counseling tapes (two tapes per a client). The first and last tapes were omitted from the analysis. The raters worked independently after training, with the exception of the three meetings previously mentioned for reliability checks.

Ten minute samples were chosen from each of the 48 tapes (24/rater) as the standard of measurement within which every counselor response was rated on each of the four dimensions of the Counselor Verbal Response Scale. In effect, raters were required to pause after each counselor response within the ten minute sample and make a dichotomous judgment on each of the four dimensions.

RESULTS

The following results are based on scores obtained from 50 Ss. Although initially there were 54 Ss in the five groups, three moved and one was eliminated from the analysis because of incomplete post-test data.

One of the primary objectives of this study was to determine if the Ss in the different treatment groups showed differential improvement with respect to the five specific criteria used in this study. In order to meet this objective five specific questions were asked and one way analyses of variance techniques were used to answer the statistical questions.

Objective One

The first statistical hypothesis was: "There are no improvement differences in school anxiety among the five treatment groups." The criterion for this analysis was the change score with respect to the TASC. The criterion was the post-treatment score minus the pre-treatment score. A negative value indicates that the anxiety-measured by the instrument was reduced after the treatments were administered. The results found in TABLE 1 indicate that the change scores were not different among the treatment groups.

TABLE 1

Analysis of Variance Summary Table For Change Scores on the TASC
for the Five Treatment Groups.

| Source | df | SS | MS | F |
|--------|----|---------|--------|------|
| Among | 4 | 478.78 | 119.70 | 1.12 |
| Within | 45 | 4827.72 | 107.28 | |
| Total | 49 | 5306.50 | | |

Due to the fact that the treatments were found to have no statistically significant differential effects with respect to changes on the TASC, TABLE 2 was constructed to help interpret this result. The greatest

TABLE 2

Mean Change Scores on the TASC for the
Five Treatment Conditions.

| Treatment | Mean Change* |
|--------------------|--------------|
| Counseling | -9.73 |
| Control Subjects | -8.56 |
| Control Classrooms | -12.00 |
| Teacher Guidance | -2.4 |
| Public Commitment | -8.42 |

*A negative score indicates reduction in anxiety.

desired change was observed in the control classrooms. The least amount of change in anxiety, as measured by the TASC, was observed in the teacher guidance treatment condition. The remaining three treatment groups (counseling control and public commitment) had similar results.

Objective Two

The second statistical hypothesis was: "There are no improvement differences in student behavior (severity as rated by Ss).\" The criterion for this analysis was the change in the severity score on the CBRS. A negative score indicates that the severity of the problem was reduced after treatment according to the individual Ss. The results in TABLE 3 indicate there was no significant difference with respect to treatment groups.

TABLE 3

Analysis of Variance Summary Table for the Change in Problem Severity Indicated by the Subjects in the Five Treatment Groups.

| Source | df | SS | MS | F |
|---------------|-----------|---------|-------|------|
| Among | 4 | 175.21 | 43.80 | 1.85 |
| <u>Within</u> | <u>45</u> | 1064.87 | 23.66 | |
| Total | 49 | | | |

Although the five mean changes were not found to be significant, the means in TABLE 4 do indicate some differences. In reviewing the analysis of variance results, it is obvious that there is a great deal of within treatment variation which is accounting for the largest portion of variance in the table. It is obvious from TABLE 4 that Ss in the counseling treatment showed the greatest change with respect to problem severity.

TABLE 4

Mean Change in the Severity of the Problem as Reported by the Subjects in the Five Treatment Groups.

| Treatment | Mean Change* |
|--------------------|--------------|
| Counseling | -6.00 |
| Control Subjects | -1.44 |
| Control Classrooms | -0.5 |
| Teacher Guidance | -2.6 |
| Public Commitment | -2.25 |

*A negative change indicates a reduction in problem severity.

Objective Three

The third statistical hypothesis was: "There are no improvement differences in student behaviors (severity as rated by the teachers). This statistical question dealt with the severity of the problems as reported on the CBRS by the teachers. The criterion for this analysis was the change in the severity score. A negative score indicated that the severity of the problem was reduced after treatment according to the teachers.

The results in TABLE 5 indicate that there was no statistically significant difference with respect to the five treatment groups.

TABLE 5

Analysis of Variance Summary Table for the Change in Problem Severity Indicated by the Teachers in the Five Treatment Groups.

| Source | df | SS | MS | F |
|--------|----|---------|-------|------|
| Among | 4 | 200.79 | 50.20 | 1.34 |
| Within | 45 | 1681.21 | 37.36 | |
| Total | 49 | 1882.00 | | |

In TABLE 6 the mean change scores in problem severity as indicated by the teachers are reported. It is important to note that the teachers who had students working with counselors indicated greater problem severity than those who did not. It is also of interest to note that the Ss ratings indicated a decrease in severity (TABLE 4) while the teacher ratings indicated an increase in problem severity.

TABLE 6

Mean Change Scores on Problem Severity as Reported
by the Teachers for the Five Treatment Groups.

| Treatment | Mean Change |
|--------------------|-------------|
| Counseling | 2.67 |
| Control Subjects | .56 |
| Control Classrooms | 2.88 |
| Teacher Guidance | 2.10 |
| Public Commitment | .64 |

Objective 4

The fourth statistical hypothesis was: "There are no improvement differences in teacher-pupil relations." The criterion for this analysis was change in scores (pre-post) obtained on the Teacher-Pupil Relationship Inventory (TPRI). A positive score meant that the pupil-teacher relationship was better after the treatments were administered. The results in TABLE 7 clearly indicate that there was no significant difference with respect to the five treatment groups.

TABLE 7

Analysis of Variance Summary Table for the Change Scores on the Teacher Pupil Relationship Inventory for the Five Treatment Groups.

| Source | df | SS | MS | F |
|---------------|-----------|--------------|-----|-----|
| Among | 4 | 1.51 | .38 | .90 |
| <u>Within</u> | <u>45</u> | <u>18.91</u> | .42 | |
| Total | 49 | 20.42 | | |

In TABLE 8 the mean change scores on the TPRI are reported for the five treatment conditions. The mean change for the counseling group seems to be somewhat erratic with respect to the remainder of the mean change scores.

TABLE 8

Mean Change in Scores on the Teacher Pupil Relationship Inventory for the Five Treatment Groups.

| Treatment | Mean Change |
|--------------------|-------------|
| Counseling | -.09 |
| Control Subjects | .01 |
| Control Classrooms | .07 |
| Teacher Guidance | .13 |
| Public Commitment | .39 |

Objective Five

The fifth statistical hypothesis was: "There are no improvement differences in sociometric status." The criterion for this analysis was change in the sociometric index of the Ss. A positive score indicates that the individual was selected more often after the treatment than before the treatment. The results in TABLE 9 indicate that the mean changes were not significantly different for the five treatment groups.

TABLE 9

Analysis of Variance Summary Table for the Change Scores on the Sociometric Test for the Five Treatment Groups.

| Source | df | SS | MS | F |
|--------|----|-------|------|------|
| Among | 4 | 5.35 | 1.34 | 1.22 |
| Within | 45 | 49.58 | 1.10 | |
| Total | 49 | 54.93 | | |

In TABLE 10 the mean change scores on the Sociometric Test are reported for the five treatment conditions.

TABLE 10

Mean Change in Scores on the Sociometric Test for the Five Treatment Groups.

| Treatment | Mean Change |
|--------------------|-------------|
| Counseling | .40 |
| Control Subjects | .78 |
| Control Classrooms | .72 |
| Teacher Guidance | .63 |
| Public Commitment | .98 |

Objective Six

The sixth major objective was to investigate behavioral severity reduction as rated by the Ss and by the teachers between the committed and non-committed behaviors of the public commitment condition. In the Public Commitment Group nine Ss made a commitment to change on seven of the fifteen behaviors listed on the CBRS. These seven behaviors appear as numbers 1, 2, 3, 4, 7, 10, & 15 on the CBRS. On two of the behaviors (1 & 3), two different Ss made commitments to change.

TABLES 11 and 12 show the frequencies of positive (+), negative (-), or no change (0) for Ss who committed on each of the seven specific behaviors and also

those in the Public Commitment (PC) Group who did not make a commitment. The three columns on the left in TABLE 11 indicate ratings of the individual Ss and their individual teachers (T) of student behavioral change. The three adjacent columns on the right are the remaining Ss in the PC group who did not make a commitment to change.

The small N size of the PC group precluded any statistical analysis of the data and, therefore, only the frequencies of positive, negative, or no change are reported.

Table 12, below table 11, is merely a representation of the combined data which is shown in table 11.

TABLE 11

Frequencies of Change Among Public Commitment Experimental Group Subjects, who did or did not commit, on the Individual Behaviors in Which Commitments to Change Were Made. (S= subject, T= teacher.)

| Behavior | | Comm. | Ss | + | | Non-Comm. | Ss | + |
|------------------------------------|----|-------|----|---|----|-----------|----|---|
| | | - | 0 | | | - | 0 | |
| Completing homework | S1 | 1 | 0 | 0 | Ss | 2 | 7 | 1 |
| | T1 | 0 | 1 | 0 | Ts | 2 | 7 | 1 |
| Completing homework | S2 | 0 | 0 | 1 | Ss | 2 | 7 | 1 |
| | T2 | 0 | 1 | 0 | Ts | 2 | 7 | 1 |
| Paying attention to the teacher | S3 | 0 | 1 | 0 | Ss | 1 | 10 | 1 |
| | T3 | 0 | 1 | 0 | Ts | 1 | 10 | 1 |
| Appearing messy | S4 | 0 | 1 | 0 | Ss | 1 | 5 | 4 |
| | T4 | 0 | 1 | 0 | Ts | 1 | 8 | 1 |
| Appearing messy | S5 | 0 | 1 | 0 | Ss | 1 | 5 | 4 |
| | T5 | 0 | 0 | 1 | Ts | 1 | 8 | 1 |
| Checking school work carefully | S6 | 0 | 1 | 0 | Ss | 1 | 9 | 1 |
| | T6 | 0 | 1 | 0 | Ts | 2 | 8 | 1 |
| Keeping desk in order | S7 | 0 | 0 | 1 | Ss | 2 | 5 | 4 |
| | T7 | 0 | 1 | 0 | Ts | 3 | 7 | 1 |
| Being loud and boisterous in class | S8 | 0 | 0 | 1 | Ss | 2 | 7 | 2 |
| | T8 | 0 | 1 | 0 | Ts | 1 | 10 | 0 |
| Keeping my mind on my work | S9 | 0 | 0 | 1 | Ss | 2 | 6 | 3 |
| | T9 | 0 | 1 | 0 | Ts | 1 | 8 | 2 |

TABLE 12

Combined Frequencies of Change, Among Public Commitment Experimental Group Subjects, who did or did not commit, on the Combined Behaviors in Which Commitments to Change Were Made.

| Pub. Comm. | | | | | Non-Comm. | | | |
|-------------------------------|---|---|---|---|-----------|----|----|----|
| - 0 + | | | | | - 0 + | | | |
| All Committed Behaviors | S | 1 | 4 | 4 | S | 14 | 61 | 21 |
| | T | 0 | 8 | 1 | T | 14 | 73 | 9 |

To aid the reader in better understanding the meaning of the tables, a more detailed discussion follows.

Student Ratings

Behavior 1. Two Ss (S1 and S2) committed on behavior one. One S reported a negative change (the only occurrence by a publicly committed counselee) and another a positive change. For the Ss which did not commit on this behavior, two changed negatively, seven remained the same and one moved in a positive direction.

Behaviors 2, 3, & 4. These behaviors are discussed together because they yielded quite similar findings. Those subjects who committed reported no change, while the Ss which did not commit on these behaviors fell in all three categories with the majority showing no change in behavior.

Behaviors 7, 10, & 15. From the standpoint of counseling success, changes reported by committed students on these behaviors were most encouraging. All PC Ss, (one in each behavior) responded on the CBRS that they had altered their behaviors positively. As with the other behaviors, the non-committed Ss reported change positively, negatively, or not at all, with the majority in the no change category.

Teacher Ratings

Behaviors 1, 2, 4, 7, 10, & 15. The reported teacher ratings for these six behaviors were so similar that they need not be considered separately. In all cases teachers reported that all those Ss who committed remained the same on

committed behaviors. As with non-committed student ratings, the teachers reported that the Ss changed in both positive and negative direction (except of behavior 10) with most remaining the same.

Behavior 3. With respect to this behavior the teachers who responded to perceived student change reported that one S remained the same while the other improved. The non-committed are similar to those in the other six behavioral categories.

Comparison of Teacher and Student Ratings

In comparing the committed Ss perceived changes and those changes as seen by their teachers, it was rather discouraging to note that only one teacher observed a positive change. On the other hand four students indicated a positive change, one moved in the negative direction, while four remained the same.

For the non-committed Ss one clear pattern emerges. The large majority of both teachers and students reported no behavioral changes. For those who did change, approximately equal numbers were in the positive and negative directions.

A striking feature of TABLE 12 is that teachers did not tend to perceive student behavioral change as readily as did the students themselves. In the committed group there were four reports of positive change for the students compared with only one for teachers. In the non-commitment group there were 21 ratings of positive student change as opposed to nine such ratings by teachers.

Objective Seven

Objective seven was concerned with the degree to which conditions, as measured by the CVRS, were provided for counseled Ss. Counseling samples for each subject were scored by computing the percentage of the total number of counselor responses (from both taped samples combined) which exhibited each of the following characteristics: affect; understanding; specificity; exploration. A total score for the overall percentage of responses which exhibited these characteristics was also computed. TABLE 13 presents the median percentages of sampled counselor responses which indicated specified characteristics. As can be observed, a relatively low degree of these conditions were provided.

TABLE 13

Median Percentages of Counselor Responses Exhibiting
Specified Characteristics

| | |
|--------------------|------------|
| Affect | 3% |
| Understanding | 60% |
| Specificity | 59% |
| <u>Exploration</u> | <u>20%</u> |
| Total | 36% |

Objective Eight

The eighth objective was to investigate the relationships among criterion improvement and the degree to which the conditions, as measured by the CVRS, were provided for counseled Ss. Spearman rank-order correlation coefficients were computed to describe the relationships among criterion improvements and the degree to which the specified characteristics were present in the counselors' responses. The correlations of each counselor-response characteristic to criterion improvement is presented in TABLE 14. Post-test data was not available for one subject who was absent during post-testing, and thus the data presented in TABLE 14 is based upon 23 subjects.

TABLE 14

Correlation Coefficients (Spearman r) or Criterion Improvements
to Counselor-Response Characteristics

| CRITERIA | AFFECT | UNDER- STANDING | SPECIF- ICITY | EXPLOR- ATION | TOTAL |
|--|--------|--------------------|------------------|------------------|-------|
| Teacher-pupil relationship inventory | .26 | -.24 | -.14 | .38* | .19 |
| Severity of problems | -.01 | .18 | .28 | .04 | .14 |
| Sociometric status | -.33 | .07 | .08 | .23 | .20 |
| Test anxiety scale for children | -.13 | .44* | .34 | .01 | .11 |

*p < .05

Significant ($r > 0$) correlation coefficients were found between exploratory responses and improvement in teacher-pupil relations as well as between understanding responses and reduction in "school anxiety" from pre- to post-test ($p < .05$). No other correlations were found to be significant.

Objective Nine

The final objective of this study was to determine if there was a difference in teacher attitude gain towards guidance between the experimental and control classrooms. The criterion used for this analysis was the change in score on the Teacher Attitude Toward Guidance Scale. The mean improvement score for those teachers (N-12) working with counselors was 9.58 while the mean improvement score for those teachers (N-2) not working with counselors was -12.50. Although the samples were small, this difference was found to be significant ($p < .05$). It would seem that those teachers who worked with the counselors developed or indicated a more positive attitude toward guidance while those teachers not working with counselors developed or reported more negative attitudes toward guidance.

CONCLUSIONS AND RECOMMENDATIONS

Counseling with or without public commitment was not found ($p < .05$) to positively influence school anxiety, behavioral severity, teacher-pupil relations, or sociometric status. Analyses of additional variables are being conducted in an attempt to control for the large within treatment variation which was found in the analyses reported. These additional analyses are being conducted to answer questions such as: Do various teacher attitudes and personality characteristics (dogmatism) influence criterion improvement by treatment groups? Do various counselor characteristics (sex, experience, conditions provided) influence criterion improvement by treatment conditions? Do various client personality and demographic characteristics influence criterion improvement by treatment groups?

A relatively low degree of the conditions measured by the CVRS were provided for counseled ss (Affective: 8%, Understanding: 60%, Specificity: 57%,

Exploration: 20%, and total 36%). However, the relevance of the level of therapeutic conditions for this age group has been questioned by findings of a previous study. Austin (1969) reported that differences in the level to which counselor responses exhibited the therapeutic characteristics described in the CVRS (Counselor Verbal Response Scale) depended upon the age of the counselee (i.e. the younger the child the less the conditions were provided). He also inferred that the conditions are less relevant for young children than they are for adults. Furthermore, in investigating the relationships among criterion improvement and the degree to which the conditions were provided for the counseled Ss of treatments one and two of this study, the relevance of these conditions to the employed criteria seem questionable. Only two of the twenty correlations were found to be significant. These were exploratory counselor responses, responses which permit or encourage client exploration, with client improvement in teacher-pupil relationships ($r = .38$) and understanding counselor responses with reduction of school anxiety ($r = .44$).

TABLE 14 also suggests that the measured counseling conditions might have different relevance for various outcome criteria. Affective counselor responses correlated positively with client improvement in teacher-pupil relationships ($r = .26$) but negatively with improvement in sociometric status ($r = -.33$), while understanding counselor responses were positively and significantly correlated with client reduction in school anxiety ($r = .44$) but were negatively correlated with client improvement in teacher-pupil relationships ($r = -.24$).

Thus, it may be that certain counseling "conditions" are irrelevant to some criteria or behavioral problems of children while having relevance in either a positive or negative direction to other criteria. This conclusion seems in agreement with other recently published studies conducted with elementary school children. Matthes, Kranzler and Mayer (1968) found perceived counselor unconditionality of regard and change in sociometric status to be negatively related ($P < .01$), i.e., the higher the level of unconditionality of regard that 5th and 6th grade students perceived in the counseling relationship, the smaller his gain in sociometric status. Leventhal and Kranzler (1968) reported negative relationships for 4th, 5th, and 6th grade students, though non-significant, among client intra-

personal exploration and constructive personality change. Matthes, Kranzler, and Mayer (1969) also reported no significant relationships among accurate empathy, unconditional positive regard, and counselor self congruence with 5th and 6th grade students' sociometric status, attitudes toward school, and social skills.

Teachers who worked with the counselors were found to indicate a more positive attitude toward guidance than those who did not work with the counselors (1.2. the controls). In fact, the attitudes of teachers who did not work with the counselors moved in a negative direction toward guidance. It would appear that counselors should interact with all the teachers in their particular school(s).

The above conclusions suggest that counselors working with elementary school children need not be concerned with providing the "same" conditions in each counseling relationship. At this time our knowledge of what constitutes an effective counseling relationship with elementary school age students is embryonic. Additional research should be designed to evaluate the relevancy of specific counselor behaviors or conditions with specific tailored criteria. Other approaches such as consulting and in service training should also be explored as avenues for enhancing elementary school students' interpersonal relationships and personal adjustment.

APPENDIX

The Test Anxiety Scale for Children

I'm going to be asking you some questions--questions different from the usual school questions for these are about how you feel and so have no right or wrong answers. First I'll hand out the answer sheets and then I'll tell you more about the questions. . . .

Write your name at the top of the first page, both your first and your last names. . . . Also write a "B" if you're a boy or a "G" if you're a girl.

As I said before, I am going to ask you some questions. No one but myself will see your answers to these questions, not your teacher or your principal or your parents. These questions are different from other questions that you are asked in school. These questions are different because there are no right or wrong answers. You are to listen to each question and then put a circle around either "yes" or "no." These questions are about how you think and feel differently. The person sitting next to you might put a circle around "yes" and you may put a circle around "no." For example, if I asked you this question: "Do you like to play ball?" some of you would put a circle around "yes" and some of you would put it around "no." Your answer depends on how you think and feel. These questions are about how you think and feel about school, and about a lot of other things. Remember, listen carefully to each question and answer it "yes" or "no" by deciding how you think and feel. If you don't understand a question, ask me about it.

Now let's start by everybody putting their finger on Number 1. Here is the first question. Number 1. "Do you worry when the teacher says that he is going to ask you questions to find out how much you know?"

(This procedure of introducing the questions is repeated for several of them and the examiner continues throughout to say the number of the question before reading it.)

. . . .The questions are always read to the class and the children are never required to read them. . . . A Child's score on the scale was the number of times he encircled "yes" on his answer sheet. We give below the TASC.

TASC

1. Do you worry when the teacher says that she is going to ask you questions to find how much you know?
2. Do you worry about being promoted. That is, passing from the ____ to the ____ grade at the end of the year?
3. When the teacher asks you to get up in front of the class to read aloud, are you afraid that you are going to make some bad mistakes?
4. When the teacher says that she is going to call upon some boys and girls in the class to do arithmetic problems, do you hope that she will call upon someone else and not on you?
5. Do you sometimes dream at night that you are in school and cannot answer the teacher's questions?
6. When the teacher says that she is going to find out how much you have learned, does your heart begin to beat faster?
7. When the teacher is teaching you about arithmetic, do you feel that other children in the class understand her better than you?

8. When you are in bed at night, do you sometimes worry about how you are going to do in class the next day?
9. When the teachers asks you to write on the blackboard in front of the class, does the hand you write with sometimes shake a little?
10. When the teacher is teaching you about reading, do you feel that other children in the class understand her better than you?
11. Do you think you worry more about school than other children?
12. When you at home and you are thinking about your arithmetic lesson for the next day, do you become afraid that you will get the answers wrong when the teacher calls upon you?
13. If you are sick and miss school, do you worry that you will do more poorly in your school work than other children when you return to school?
14. Do you sometimes dream at night that other boys and girls in your class can do things that you cannot do?
15. When you are home and you are thinking about your reading lesson for the next day, do you worry that you will do poorly on the lesson?
16. When the teacher says that she is going to find out how much you have learned, do you get a funny feeling in your stomach?
17. If you did very poorly when the teacher called on you, would you probably feel like crying even though you would try not to cry?
18. Do you sometimes dream at night that the teacher is angry because you do not know your lessons?

(The examiner then makes the following statement before continuing:)

In the following questions the word "test" is used. What I mean by "test" is any time the teacher asks you to do something to find out how much you know or how much you have learned. It could be by your writing on paper, or by your speaking aloud, or by writing on the blackboard. Do you understand what I mean by "test"---it is any time the teacher asks you to do something to find out how much you know.

19. Are you afraid of school tests?
20. Do you worry alot before you take a test?
21. Do you worry alot while you are taking a test?
22. After you have taken a test do you worry about how well you did on the test?
23. Do you sometimes dream at night that you did poorly on a test you had in school that day?
24. When you are taking a test, does the hand you write with shake a little?
25. When the teacher says that she is going to give the class a test, do you become afraid that you will do poorly?

26. When you are taking a hard test, do you forget some things you know very well before you started taking the test?
27. Do you wish a lot of times that you didn't worry so much about tests?
28. When the teacher says that she is going to give the class a test, do you get nervous or funny feeling?
29. While you are taking a test do you usually think you are doing poorly?
30. While you are on your way to school, do you sometimes worry that the teacher may give the class a test?

The Appropriateness of the Scale

.....

.....(In utilizing the TASC we did assume that a high score reflected anxiety-like reactions in a variety of test-like situations so that it was likely that the label "test anxious" was appropriate for such a child. Similarly, we assume that a low score on the TASC suggested that the child was not characteristically anxious in test and test-like situations.)

.....

TEACHER ATTITUDE TOWARD GUIDANCE AND COUNSELING

Teacher _____
Grade Level _____
School _____

Directions

Your response to the following questionnaire will help us to understand how teachers feel about the value of counseling with elementary school children. Regardless of the amount of first-hand experience you have had with elementary school counseling, we would like you to indicate your general impressions about counseling. Your response will be kept confidential. Put a circle around the answer most representative of your present feelings. (circle only one answer for each item.) Do not spend too much time on any one item.

- | | |
|--|--|
| 1. Some change tends to occur in pupils after they have received counseling. | a. Not characteristic of my present feelings. b. Slightly characteristic of my present feelings. c. Moderately characteristic of my present feelings. d. Quite characteristic of my present feelings. e. Highly characteristic of my present feelings. |
| <hr/> | |
| 2. Counselors are able to help children with school-related problems. | a. Not characteristic of my present feelings. b. Slightly characteristic of my present feelings. c. Moderately characteristic of my present feelings. d. Quite characteristic of my present feelings. e. Highly characteristic of my present feelings. |
| <hr/> | |
| 3. Counselors usually help teachers understand their pupils better. | a. Not characteristic of my present feelings. b. Slightly characteristic of my present feelings. c. Moderately characteristic of my present feelings. d. Quite characteristic of my present feelings. e. Highly characteristic of my present feelings. |

4. Pupils enjoy working with a counselor.

- a. Not characteristic of my present feelings.
- b. Slightly characteristic of my present feelings.
- c. Moderately characteristic of my present feelings.
- d. Quite characteristic of my present feelings.
- e. Highly characteristic of my present feelings.

5. All children should have an opportunity to talk with a counselor.

- a. Not characteristic of my present feelings.
- b. Slightly characteristic of my present feelings.
- c. Moderately characteristic of my present feelings.
- d. Quite characteristic of my present feelings.
- e. Highly characteristic of my present feelings.

6. It is very important to have a guidance program in the elementary school.

- a. Not characteristic of my present feelings.
- b. Slightly characteristic of my present feelings.
- c. Moderately characteristic of my present feelings.
- d. Quite characteristic of my present feelings.
- e. Highly characteristic of my present feelings.

7. A child's classwork will usually improve after he works with a counselor for awhile.

- a. Not characteristic of my present feelings.
- b. Slightly characteristic of my present feelings.
- c. Moderately characteristic of my present feelings.
- d. Quite characteristic of my present feelings.
- e. Highly characteristic of my present feelings.

8. Counselors are helpful to teachers in locating guidance materials to be used in the classroom.

- a. Not characteristic of my present feelings.
- b. Slightly characteristic of my present feelings.
- c. Moderately characteristic of my present feelings.
- d. Quite characteristic of my present feelings.
- e. Highly characteristic of my present feelings.

9. A child's behavior will usually improve after he works with a counselor for awhile.
- a. Not characteristic of my present feelings.
 - b. Slightly characteristic of my present feelings.
 - c. Moderately characteristic of my present feelings.
 - d. Quite characteristic of my present feelings.
 - e. Highly characteristic of my present feelings.
-
10. A student in need of help should be encouraged by his teacher to see a counselor.
- a. Not characteristic of my present feelings.
 - b. Slightly characteristic of my present feelings.
 - c. Moderately characteristic of my present feelings.
 - d. Quite characteristic of my present feelings.
 - e. Highly characteristic of my present feelings.
-
11. I wonder just what a counselor does.
- a. Not characteristic of my present feelings.
 - b. Slightly characteristic of my present feelings.
 - c. Moderately characteristic of my present feelings.
 - d. Quite characteristic of my present feelings.
 - e. Highly characteristic of my present feelings.
-
12. In general, the money used to pay for counseling services at the elementary school level is well spent.
- a. Not characteristic of my present feelings.
 - b. Slightly characteristic of my present feelings.
 - c. Moderately characteristic of my present feelings.
 - d. Quite characteristic of my present feelings.
 - e. Highly characteristic of my present feelings.

THE CHILD BEHAVIOR RATING SCALE

Your Name _____
Teacher's Name _____
School _____
Grade _____

Directions to the Students

Below are listed 15 different activities which some students consider to be problems. Read each one carefully and put a check in the box below each activity if you consider it to be a problem for you.

At the right hand side next to each activity, please indicate how often you behave in this way. You must indicate by circling a, b, c, or d for each of the 15 activities regardless of whether you have checked them as problems or not. Then indicate how often you complete your homework by circling a if you never complete your homework, circle b if you complete your homework less than one-half the time, and so forth.

1. Completing homework
(check if it is a problem for you)

☐

How often do I complete homework
a. never
b. less than half of the time
c. more than half of the time
d. always

2. Paying attention to the teacher
(check if it is a problem for you)

☐

How often do I pay attention to the teacher
a. never
b. less than half the time
c. more than half the time
d. always

3. Appearing messy
(check if it is a problem for you)

☐

How often do I appear or look messy
a. always
b. more than half the time
c. less than half the time
d. never

4. Checking my school work carefully
(check if it is a problem for you)

☐

How often do I check my school work carefully
a. never
b. less than half the time
c. more than half the time
d. always

5. Fighting at school
(check if it is a problem for you)

☐

How often do I fight at school
a. one or more times a week
b. once every two weeks
c. once a month
d. never

6. Playing with classmates during recess
(check if it is a problem for you)

☐

How often do I play with classmates during recess

- a. never
- b. once a week
- c. three times a week
- d. every recess

7. Keeping my desk in order
(check if it is a problem for you)

☐

How often do I keep my desk in order

- a. it is never in order
- b. one day a week it is in order
- c. three days a week it is in order
- d. always in order

8. Being late to class
(check if it is a problem for you)

☐

How often am I late to class

- a. always
- b. once every one or two weeks
- c. once a month or more
- d. never

9. Participating in class activities
(check if it is a problem for you)

☐

How often do I participate in class activities

- a. never
- b. twice a week
- c. once a day
- d. every chance I get

10. Being loud and boisterous in class
(check if it is a problem for you)

☐

How often am I loud and boisterous and disruptive during a class

- a. every day
- b. three times a week
- c. once a week
- d. never

11. Giving up too easily
(check if it is a problem for you)

☐

How often do I give up too easily

- a. always
- b. more than half of the time
- c. less than half of the time
- d. never

12. Being a good sport
(check if it is a problem for you)

☐

How often am I a good sport

- a. never
- b. less than half of the time
- c. more than half of the time
- d. all of the time

13. Controlling my temper
(check if it is a problem for you)

☐

How often do I control my temper

- a. never
- b. less than half of the time
- c. more than half of the time
- d. always

-
14. Talking too much during a conversation
(check if it is a problem for you)

☐

How often do I talk too much during a conversation

- a. always
- b. over half of the time
- c. less than half of the time
- d. never

-
15. Keeping my mind on my work
(check if it is a problem for you)

☐

How often do I have trouble keeping my mind on my work

- a. always
- b. over half the time
- c. less than half the time
- d. never

IPR COUNSELOR VERBAL RESPONSE SCALE

The Counselor Verbal Response Scale is an attempt to describe a counselor's response to client communication in terms of four dichotomized dimensions: (a) affective-cognitive; (b) understanding-nonunderstanding; (c) specific-non-specific; (d) exploratory-nonexploratory. These dimensions have been selected because they seem to represent aspects of counselor behavior which seem to make theoretical sense and contribute to client progress. A fifth dimension--effective-noneffective--provides a global rating of the adequacy of each response which is made independently of the four descriptive ratings.

The unit for analysis is the verbal interaction between counselor and client represented by a client statement and counselor response. A counselor is rated on each of the five dimensions of the rating scale, with every client-counselor interaction being judged independently of preceding units. In judging an individual response, the primary focus is on describing how the counselor responded to the verbal and nonverbal elements of the client's communication.

Description of Rating Dimensions

I. Affect-cognitive dimension

The affective-cognitive dimension indicates whether a counselor's response refers to any affective component of a client's communication or concerns itself primarily with the cognitive component of that communication.

A. Affective responses--Affective responses generally make reference to emotions, feelings, fears, etc. The judge's rating is solely by the content and/or intent of the counselor's response, regardless of whether it be reflection, clarification or interpretation. These responses attempt to maintain the focus on the affective component of a client's communication. Thus they may:

- (a) Refer directly to an explicit or implicit reference to affect (either verbal or nonverbal) on the part of the client.

Example: "It sounds like you were really angry at him."

- (b) Encourage an expression of affect on the part of the client.

Example: "How does it make you feel when your parents argue?"

- (c) Approve of an expression of affect on the part of the client.

Example: "It doesn't hurt to let your feelings out once in a while, does it?"

- (d) Presents a model for the use of affect by the client.

Example: "If somebody treated me like that, I'd really be mad."

Special care must be taken in rating responses which use the word "feel." For example, in the statement "Do you feel that your student teaching experience is helping you get the idea of teaching?", the phrase "Do you feel that" really means "do you think that." Similarly, the expression "How are you feeling?" is often used in a matter-of-fact, conversational manner. Thus, although the verb "to feel" is used in both these examples, these statements do not represent responses which would be judged "affective."

B. Cognitive Responses--Cognitive responses deal primarily with the cognitive element of a client's communication. Frequently, such responses seek information of a factual nature. They generally maintain the interaction on the cognitive level. Such responses may:

- (a) Refer directly to the cognitive component of the client's statement.

Example: "So then you're thinking about switching your major to chemistry?"

- (b) Seeks further information of a factual nature from the client.

Example: "What were your grades last term?"

- (c) Encourage the client to continue to respond at the cognitive level.

Example: "How did you get interested in art?"

II. Understanding-nonunderstanding dimension

The understanding-nonunderstanding dimension indicates whether a counselor's response communicates to the client that the counselor understands or is seeking to understand the client's basic communication, thereby encouraging the client to continue to gain insight into the nature of his concerns.

A. Understanding responses--Understanding responses communicate to the client that the counselor understands the client's communication--the counselor makes appropriate reference to what the client is expressing or trying to express both verbally and nonverbally--or the counselor is clearly seeking enough information of either a cognitive or affective nature to gain such understanding.

Such responses:

- (a) Directly communicate an understanding of the client's communication.

Example: "In other words, you really want to be treated like a man."

- (b) Seek further information from the client in such a way as to facilitate both the counselor's and the client's understanding of the basic problems.

Example: "What does being a man mean to you?"

- (c) Reinforce or give approval of client communications which exhibit understanding.

Example: CL: "I guess then when people criticize me, I'm afraid they'll leave me."

CO: "I see you're beginning to make some connection between your behavior and your feeling."

B. Nonunderstanding responses--Nonunderstanding responses are those in which the counselor fails to understand the client's basic communication or makes no attempt to obtain appropriate information from the client. In essence, nonunderstanding implies misunderstanding. Such responses:

- (a) Communicate misunderstanding of the client's basic concern.

Example: CL: "When he said that, I just turned red and clenched my fists."

CO: "Some people don't say nice things."

- (b) Seek information which may be irrelevant to the client's communication.

Example: CL: "I seem to have a hard time getting along with my brothers."

CO: "Do all of your brothers live at home with you?"

- (c) Squelch client understanding or move the focus to another irrelevant area.

Example: CL: "I guess I'm really afraid that other people will laugh at me."

CO: "We're the butt of other people's jokes sometimes."

Example: CL: "Sometimes I really hate my aunt."

CO: "Will things be better when you go to college?"

III. Specific-nonspecific dimension

The specific-nonspecific dimension indicates whether the counselor's response delineates the client's problems and is central to the client's communication or whether the response does not specify the client's concern. In essence, it describes whether the counselor deals with the client's communication in a general, vague, or peripheral manner, or "zeros in" on the core of the client's communication. NB: A response judged to be nonunderstanding must also be nonspecific since it would, by definition, misunderstand the client's communication and not help the client to delineate his concerns. Responses judged understanding might be either specific (core) or nonspecific (peripheral) i.e., they would be peripheral if the counselor conveys only a vague idea that a problem exists or "flirts" with the idea rather than helping the client delineate some of the dimensions of his concerns.

A. Specific responses--Specific responses focus on the core concerns being presented either explicitly or implicitly, verbally or nonverbally, by the client. Such responses:

- (a) Delineate more closely the client's basic concerns.

Example: "this vague feeling you have when you get in tense situations--is it anger or fear?"

- (b) Encourage the client to discriminate among stimuli affecting him.

Example: "Do you feel _____ in all your classes or only in some classes?"

- (c) Reward the client for being specific.

Example: CL: "I guess I feel this way most often with someone who reminds me of my father."

CO: "So as you put what others say in perspective, the whole world doesn't seem so bad, it's only when someone you value, like your father, doesn't pay any attention that you feel hurt."

B. Nonspecific responses--Nonspecific responses indicate that the counselor is not focusing on the basic concerns of the client or is not yet able to help the client differentiate among various stimuli. Such responses either miss the problem area completely (such responses are also nonunderstanding) or occur when the counselor is seeking to understand the client's communication and has been presented with only vague bits of information about the client's concern. Thus, such responses:

- (a) Fail to delineate the client's concern and cannot bring them into sharper focus.

Example: "It seems your problem isn't very clear-- can you tell me more about it?"

- (b) Completely miss the basic concerns being presented by the client even though the counselor may ask for specific details.

Example: CL: "I've gotten all A's this year and I still feel lousy."

CO: "What were your grades before then?"

- (c) Discourage the client from bringing his concerns into sharper focus.

Example: "You and your sister argue all the time. What do other people think of your sister?"

IV. Exploratory-nonexploratory

The exploratory-nonexploratory dimension indicates whether a counselor's response permits or encourages the client to explore his cognitive or affective concerns, or whether the response limits a client's exploration of these concerns.

A. Exploratory responses--Exploratory responses encourage and permit the client latitude and involvement in his response. They may focus on relevant aspects of the client's affective or cognitive concerns but clearly attempt to encourage further exploration by the client. Such responses are often open-ended and/or are delivered in a manner permitting the client freedom and flexibility in response. These responses:

- (a) Encourage the client to explore his own concerns.

Example: Cognitive--"You're not sure what you want to major in, is that it?"

Affective--"Maybe some of these times you're getting mad at yourself, what do you think?"

- (b) Assist the client to explore by providing him with possible alternatives designed to increase his range of responses.

Example: Cognitive--"What are some of the other alternatives that you have to history as a major?"

Affective--"So you're beginning to wonder if you always want to be treated like a man."

B. Nonexploratory responses--Nonexploratory responses either indicate no understanding of the client's basic communication, or so structure and limit the client's responses that they inhibit the exploratory process. These responses give the client little opportunity to explore, expand, or express himself freely.

Such responses:

Discourage further exploration on the part of the client.

Example: Cognitive--"You want to change your major to to history."

Affective--"You really resent your parents treating you like a child."

V. Effective-noneffective dimension

Ratings on the effective-noneffective dimension may be made independently of ratings on the other four dimensions of the scale. This rating is based solely upon the judge's professional impression of the appropriateness of the counselor's responses, that is, how adequately does the counselor's response deal with the client's verbal and nonverbal communication. This rating is not dependent on whether the response has been judged affective-cognitive, etc.

A rating of 4 indicates that the judge considers this response among the most appropriate possible in the given situation, while a 3 indicates that the response is appropriate but not among the best. A rating of 2 indicates a neutral response which neither measurably affects client progress nor inhibits it, while a rating of 1 indicates a response which not only lacks basic understanding of the client's concerns but which in effect may be detrimental to the specified goals of client growth.

IPR COUNSELOR VERBAL RESPONSE SCALE

Judge: _____ Subject: _____ Date: _____

| DIMENSIONS | | | | | | | | Counselor Response Evaluation | | | |
|----------------|--------|-----------|----------------|--------------------|----------|--------------|-------------|-------------------------------|-----------|---------------|--|
| Responses | Affect | Cognitive | Under Standing | Non-Under Standing | Specific | Non-Specific | Exploratory | Non-Exploratory | Effective | Non-Effective | |
| 1 | | | | | | | | | 4 | 1 | |
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| % of Responses | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | |

TOTAL _____

References

- Bem, D. J. An experimental analysis of self-persuasion. Journal of Experimental Social Psychology, 1965, 1, 199-218.
- Bem, D. J. Self-perception: An alternative interpretation of cognitive dissonance phenomena. Psychological Review, 1967, 74, 183-200.
- Brehm, J. W. Increasing cognitive dissonance by a Fait Accompli. Journal of Abnorm. Soc. Psychol., 1959, 58, 379-382.
- Brehm, J. W., and Cohen, A. R. Explorations in Cognitive Dissonance, Wiley, New York, 1962.
- Brock, T. C. and Blackwood, J. E. Dissonance reduction, social comparison, and modification of others' opinions. Journal of Abnorm. Soc. Psychol., 1962, 65, 319-324.
- Cohen, A. R., Terry, H. I., and Jones, C. B. Attitudinal effects of choice in exposure to counterpropaganda. Journal of Abnorm. Soc. Psychol., 1959, 58, 388-391.
- Combs, A. W., and Snygg, D. Individual Behavior: A Perceptual Approach to Behavior, (revised ed.), New York: Harper, 1959.
- Cooley, C. H. Human Nature and the Social Order, New York: Scribner, 1902.
- Coopersmith, S. A method for determining types of self-esteem. Journal of Abnorm. Soc. Psychol., 1959, 59, 87-94.
- Cox, F. M. Sociometric status and individual adjustment before and after play therapy. Journal of Abnorm. Soc. Psychol., 1953, 48, 354-356.
- Davidson, H. H., and Lang, G. Children's perception of their teachers' feelings toward them related to self-perception, school achievement, and behavior. Journal of Experimental Education, 1960, 29, 107-118.
- Elms, A. C., and Janis, I. L. Counternorm attitudes induced by consonant versus dissonant role-playing. Journal of Exptl. Research Personality, 1965, 1, 50-60.
- Evans, J. R., and Cody, J. J. Transfer of decision making skills learned in a counseling-like setting to similar and dissimilar situations. Journal of Counseling Psychology, in press, 1969.
- Festinger, L. A. A Theory of Cognitive Dissonance, Evanston, Ill.: Row, Peterson, 1957.
- Festinger, L. A., and Carlsmith, J. M. Cognitive consequences of forced compliance, Journal of Abnorm. Soc. Psychol., 1959, 58, 203-210.
- Flanders, Ned A. Teacher influence, pupil attitudes, and achievement. Cooperative Research Monograph No. 12, U.S. Department of Health, Education, and Welfare, Office of Education, Washington, D. C., 1965.
- Gronland, N. E. Sociometry in the Classroom, New York: Harper & Bros., 1959.
- Havighurst, J.; Bowman, P.; Liddle, G. P.; Matthews, C. V.; and Pierce, J. V. Growing Up in River City, New York: John Wiley and Sons, Inc., 1962.

- Hill, K. T., and Sarason, S. B. The Relation of test anxiety and defensiveness to test and school performance over the elementary school years: A further longitudinal study. Monographs of the Society for Research in Child Development, 1966, 31, 1-75.
- Hovland, C. I.; Campbell, E. H.; and Brock, T. The effects of 'Commitment' on opinion change following communication. In C. I. Hovland, et. al., The Order of Presentation in Persuasion, New Haven, Conn.: Yale University Press, 1957.
- Kagan, N., and Krathwohl, D. R. Studies in Human Interaction, Project #5-0800. U.S. Dept. of Health, Education & Welfare, Office of Education, Bureau of Research, 1967.
- Kranzler, G. D.; Mayer, G. R.; Dyer, C. O.; and Munger, P. F. Counseling with elementary school children: An experimental study. The Personnel and Guidance Journal, 1966, 44, 944-949.
- Leventhal, R. B., and Kranzler, G. D. The relationship between the death of interpersonal exploration and constructive personality change in elementary school children: An exploratory study. Elementary School Guidance and Counseling, 1968, 3, 12-19.
- Matthes, W. A., Kranzler, G. D., and Mayer, G. R. The relationship between conditions in counseling and selected outcome variables. Unpublished manuscript, University of Iowa, 1969.
- Matthes, W. A., Kranzler, G. D., and Mayer, G. R. The relationship between the client's perceptions of counselor behavior and change in the client's behavior. Elementary School Guidance and Counseling, 1968, 2, 179-186.
- Mayer, G. R. and Cody, J. J., Festinger's theory of cognitive dissonance applied to school counseling. The Personnel and Guidance Journal, 1968, 47, 233-239.
- Mayer, G. R., Kranzler, G. D.; and Matthes, W. A. Elementary school counseling and peer relation. Personnel and Guidance Journal, November 1967b, 3, 46.
- Mayer, G. R., Rohen, T. M., Whitley, D. A. Group counseling under children: A cognitive behavioral approach, Journal of Counseling Psychology, 1969, 16, 142-149.
- Roger, Carl R., Client-Centered Therapy, Boston: Houghton Mifflin Co., 1951, 560.
- Sarason, S. B.; Hill, K. T.; and Zimbardo, P. G. A longitudinal study of the relation of test anxiety to performance on intelligence and achievement tests. Monographs of the Society for Research in Child Development, 29, No. 7: 1-51, Serial No. 98, 1964.
- Schmuck, R. Some relationships of peer liking patterns in the classroom to pupil attitudes and achievement. The School Review, Autumn 1963, 71, 337-359.
- Schmuck, R. Some aspects of classroom social climate. Psychology in the Schools, 1966, 3, 59-65.
- Staines, J. W. The self-picture as a factor in the classroom. British Journal of Educational Psychology, June 1958, 28, 97-111.